

**FAQs:**[Easy Access Rules XML](#)**Question:**

**How to find and extract the images embedded in the OOXML flat file?**

**Answer:****Automated approach**

In the EASA XML export files, images (binary files) are stored in a Base64 ASCII string encoded format, following OpenXML standards. When programmatically accessing the file, Base64 is simple to convert back to binary, e.g.:

```
using System;
using System.Text;
public class CLRTest
{
    public static byte[] ConvertBase64ToBinary(string str)
    {
        if (str == null)
        {
            return null;
        }
        return Convert.FromBase64String(str);
    }
}
```

But how do you locate the data? An example:

Here is a screenshot of a sample eRules XML export, opened in Word:

- (1) Where a runway is not provided with a stopway or a clearway and the threshold is located at the extremity of the runway, the four declared distances should normally be equal to the length of the runway



Figure 1

And here is the XML, in pkg:part pkg:name="/word/document.xml":

```
<a:graphic
  xmlns:a="http://schemas.openxmlformats.org/drawingml/2006/main">
  <a:graphicData
    uri="http://schemas.openxmlformats.org/drawingml/2006/picture">
    <pic:pic xmlns:pic="http://schemas.openxmlformats.org/drawingml/2006/picture">
      <pic:nvPicPr>
        <pic:cNvPr id="638492513" name="adrAMCannexIVimage1.png"/>
        <pic:cNvPicPr/>
        </pic:nvPicPr>
        <pic:blipFill>
          <a:blip r:embed="rId18" cstate="print"/>
          <a:stretch>
            </pic:blipFill>
            <pic:spPr>
              </pic:pic>
            </a:graphicData>
          </a:graphic>
```

The “rId18” value in the <a:blip> element refers to this relation in pkg:part pkg:name="/word/\_rels/document.xml.rels":

```
<Relationship
  Type="http://schemas.openxmlformats.org/officeDocument/2006/relationships/image"
  Target="media/image3.png" Id="rId18"/>
```

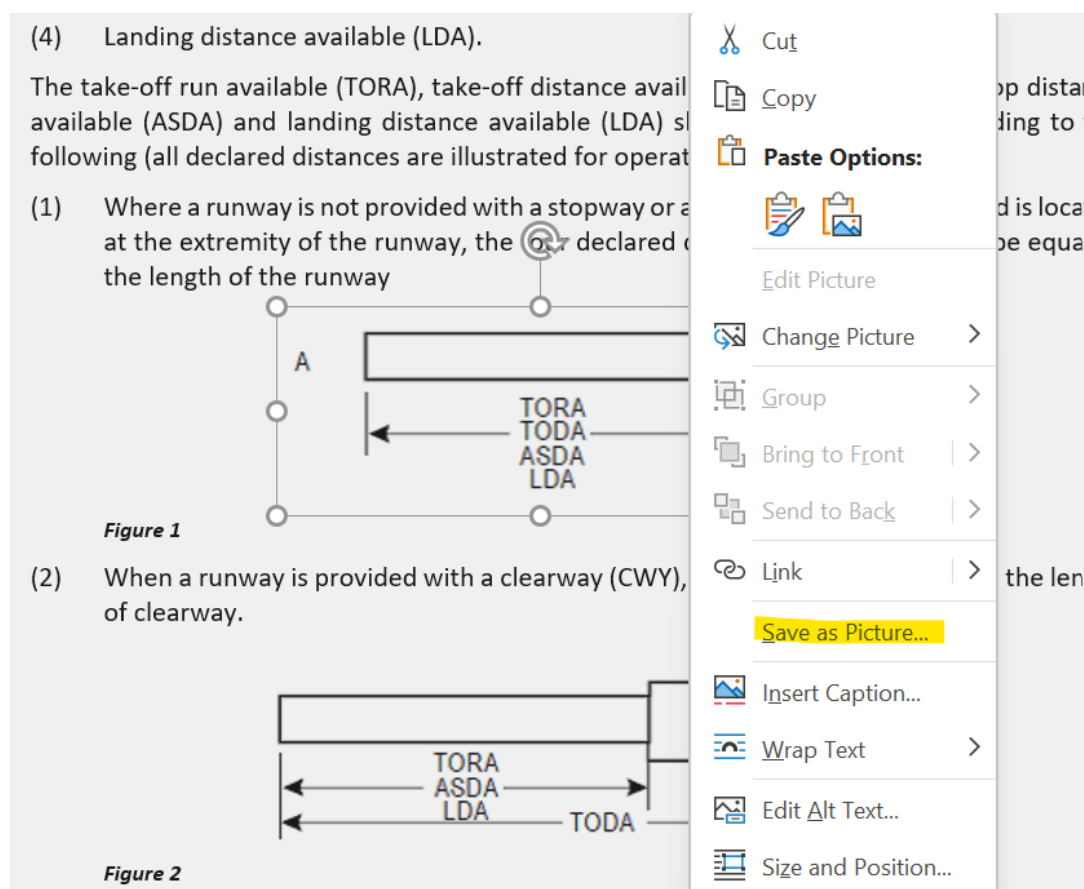
And this finally gives you the location of the Base64 encoded data:

```
<pkg:part pkg:name="/word/media/image3.png" pkg:contentType="image/png" pkg:compression="store">
  <pkg:binaryData>iVBORw0KGgoAAAANSUHEUgAAAAAABsCAYAAACine0bAAAAAXNSR0IArs4c6QAAAAARnQU1BAACx
  jwv8YQUAAAAJcEhZcwAADsMAAA7DAcdvqGQAAA1ySURBVHhe7d1pUBRnAsZxvqRqN192s8ZsTGmS
  UjeHUVNbZmvdUL84hExKIfCeAEiihCioOsRQRBEUcQ1EMZjQaOCioAcSkhpogkSFQURvDg8EDDx
  CCgeIJ7PTvc00OhgoKeDzvTzq3ormbcHq5wM/3T39NtjAyIimRgQIpKNASEi2RgQIpKNASEi2RgQ
  IpKNASEi2RgQIpKNASEi2RgQIpKNASEi2RgQIpLN4gJy9epVlJeXo6SkBGVLZRwcqhqlpaXiP69c
  uSLR9jxbFheQ7Oxs90/fHzY2Nhwqcqhy9evVCYmKi9BvxbFlsQGbonInc3Fxs376dg0MVY+/evQgP
  D2daZNEUkKcGIGGSD3i4uIYFHMwIKRMDLiZGRBSMwbETAwLcRkDYiYghNSMATETA0JcxoCYiQFb
```

## Manual approach

For a very simple *manual* approach:

1. Open the XML-file in Word
2. Select the image you want to extract
3. RightClick the image and select “Save as picture”:



**Last updated:**

28/06/2022

**Link:**

<https://www.easa.europa.eu/en/faq/136269>